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ABSTRACT

This paper addresses professionals involved in field based teacher education. The emphasis is upon the role of the student teacher supervisors. Current research on supervision is discussed as well as models of supervision, teacher effectiveness research, and systematic observation techniques. The outline of examples on models of supervision covers clinical supervision, counseling, and instructional supervision. An outline is also provided of competencies for student teachers as determined by research on teacher effectiveness. The outline of methods for observing student teachers includes event recording, duration recording, interval recording, and planned activity check recording, with examples given of recording techniques for each. It is noted that the use of systematic observation will lead to student teaching evaluations that can determine specific strengths, weaknesses, and improvements made during the student teaching experience. (JD)

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Systematic Observation Techniques to Improve Teaching

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Introduction

The major objective of this session is to acquaint professionals involved in field based teacher education with current research on supervision, models of supervision, teacher effectiveness research and, most importantly, systematic observation techniques.

Systematic observation techniques along with intervention techniques (goal setting, graphic feedback, etc.) can be instrumental for improving the effectiveness of teaching interns during the student teaching experience.

I. RESEARCH ON SUPERVISION

A recent ERIC search on the combined categories of "student teaching and field experiences" generated 1,852 entries from 1966 to 1985 (Zimpher, 1985) of which 412 referred to student teacher supervisors. Of all the research and reviews completed, the majority of information provided will be from the following studies (Locke, 1979; Griffin and Edwards, 1981; McIntrye, 1983; Haberman, 1983; and Zeichner, 1984).

It is clear from studies completed that the cooperating teacher is the most important individual in the student teaching experience. Still, in a survey of cooperating teachers, student teachers, and principals, it is evident from these individuals that the university supervisor still plays a vital role their eyes. Visitations, conferences, seminars, chief adminstrator, liaison, etc. were all mentioned as important areas of responsibility for the university supervisor.

The single most significant observation regarding student teaching is that supervision is viewed as the most important feature of the student teaching experience and this process is largely dominated by the cooperating teacher (Griffin, 1983; p. 24). Also the above mentioned studies profile university supervisors in contrast to cooperating teachers as more tolerant, more secure in their role, more independent, more socially tolerant, and more progressive in their educational philosophy. The following statements characterize the supervision process revealed throughout the studies. (Zimpher, 1983)

1. Supervision was dominated by the cooperating teacher who assumed a major role in leading the student teacher through the total experience, particularly the weekly conferences.
2. The context of supervisory comments and discussions were situation specific and temporally immediate, concerned with the day-to-day classroom life.
3. The cooperating teacher's influence was characterized by encouraging student teachers to "learn my way and find your way."
4. There was little attention to the triad [Student Teacher (ST), Cooperating Teacher (CT), University Supervisor (US)] in using or inventing a codified knowledge base to inform practice.
5. The supervisors (both CTs and USs) tended not to generalize the specific and temporal criticisms from the immediate situation to other possible settings and situations.
6. Most of the talk about the student teachers by their supervisors was more of a personal nature than professional or classroom-relevant.
7. The student teachers reported their experiences in personal rather than professional dimensions, liked their cooperating teachers if they were "warm," and thought of their university supervisors as "someone the student teacher can come to for any reason whatever," in contrast to the strictly professional talk they shared with cooperating teachers.
8. The two dominant themes of the evaluative aspects of the supervision process focused on instruction and methods of lesson preparation.

University supervisors viewed their primary responsibility as a support function for student teachers, facilitating growth, and the reduction of conflict in the school sites. Other functions, in order as

reported, include serving as a liaison between the university and the schools, providing student teachers and cooperating teachers with a set of expectations, providing clinical support for the personal and professional aspects of student teaching to the student teacher, securing good placement for the student teacher, orienting the school teacher to the school site, evaluating the student teacher, providing observation feedback, and conducting seminars. Most supervisors reported major problems to be in the breakdown of communication, or in establishing group cohesiveness in the triad.

As a descriptive profile, effective supervisors were described by themselves and others as flexible, cooperative, hard-working, humorous, and able to work with others. They also viewed themselves as pressed for time and overburdened with other responsibilities. They reported mostly weekly school/classroom visitations, felt they received little in the way of courses or instruction for actually preparing them for their role, relied heavily on their own experiences as teachers and student teachers as referents for their professional advice to their student teachers, and reported as did student teachers on the singular importance of the cooperating teacher to the whole enterprise. What impact the supervisors believed they did have fell in the personal dimension.

II. EXAMPLES ON MODELS OF SUPERVISION

1. Clinical Supervision - Cogan, 1973; and Goldhammer, 1969.

Supervision - all efforts of designated school officials directed toward providing leadership to teachers and other educational workers in the improvement of instruction; involves the stimulation of professional growth and development of teachers, the selection and revision of education objectives, materials of instruction, and methods of teaching, and the evaluation of instruction. (Carter V. Good (ed.) Dictionary of Education, 2nd e. New York: McGraw-Hill, 1959, p. 539)

Clinical Supervision - the rationale and practice designed to improve the teacher's classroom performance. It takes its principal data from the events of the classroom. The analysis of these data and the relationship between teacher and supervision form the basis of the program, procedures, and strategies designed to improve the student learning by improving the teacher's classroom behavior (Morris Cogan, Clinical Supervision, Boston: Houghton Mifflin, 1973, p. 9).

- most productive way to get teachers to analyze and change how they teach is to involve them in the analysis of what they teach.

CLINICAL CYCLE OF SUPERVISION

1. Pre-observation Conference
   -establish teacher-supervisor relationship
   -plan with teacher

-objectives of the lesson
-planning strategy for observation

2. Observation
-focus on classroom management, teacher-student interaction, teacher skills, etc.

3. Analysis
-planning strategies for conference

4. Post-Observation Conference
-teacher analysis
-set goals

5. Post Conference Analysis
-assess conference, phases of cycle, etc.

2. Counseling Theory - Mosher, R. & Purpel, O. Supervision: The Reluctant Profession Boston: Houghton Mifflin Co., 1972

-goes against theory that analysis of teaching should be restricted to issues of curriculum, content, pedagogy, pupil response and should avoid involvement with the personal response and experience of the teacher
-supervision must be responsive to the teacher as a person
-counselee/teacher is a self-evaluator and primary investigator
1. what does the teacher want to accomplish
2. personal assets and limitations
3. supervisor must listen more and talk less

Procedures
-establish a relationship with the teacher
-conference must be very general with no goals or objectives established
-observe (no observation system) eyeballing
-post lesson conference, have teacher discuss how lesson went, etc.
-start cycle again
-need 10-15 one hour conferences with the teacher for this model/theory of supervision to be effective

3. Instructional Supervision - Boyan, N. & Copeland, W. Instructional Supervision Training Program, Columbus, Ohio, Charles E. Merrill Publishing Co., 1978.

-emphasizes both an open, collegical relationship between a teacher and a supervisor and a process for confronting instructional problems with reality based data
-the method of supervision is based upon the belief that lasting improvement in a teacher's capabilities will most effectively result from a systematic process practiced jointly by supervisor and teacher
1. change in teacher behavior can take place if done in a positive way
2. recognition of needed change in behavior must come within the teacher
3. teachers are not aware of many teaching/learning behaviors which occur, awareness leads to recognition for change
4. behaviors can be revealed to the teacher through systematic

observation techniques
5. the help of a trained observer is needed and in most cases should be a supervisor
6. acceptance and internalization best achieved by cooperation and a non-threatening relationship

INSTRUCTIONAL SUPERVISION CYCLE

Pre Observation	- teacher behaviorally defines area of concern - obtain a base rate and set criteria - select observation strategy
Observation techniques	- observe with systematic observation system
Analysis	- analyze data/results - decide behaviors to change/maintain
Post Observation	- provide feedback on data - strategies to be employed to help solve problems, etc. - recycle or set criteria and go back to step #4 or #5

III. TEACHER EFFECTIVENESS

Much has been written over the past 20 years in the the area of teacher effectiveness. The advent of systematic observation has led to several findings on what goes on in classrooms and what effective teachers do to produce student achievement. So much research has been completed in this area that a review of these findings would easily take up all the space in this manuscript. The following is a summary of some of the important findings for all involved in the student teaching experience.

Mounting evidence from teacher effectiveness research (Medley, 1977; McLeish, 1981; and Siedentop, 1983) indicates that, regardless of the teacher's instructional strategy, an educational environment will be more effective if it has the following characteristics:

1. **Students are engaged in appropriate learning activities for a large percentage of class time. Effective teachers use class time wisely!**
2. **The learning atmosphere is success-oriented, with a positive, caring climate.** The evidence clearly show that teachers who develop a positive and supportive atmosphere are more effective in terms of student learning.
3. **Students receive clear objectives and high rates of information feedback from the teacher and the environment.** Students need to know what they are going to be held accountable for in class.
4. **Student progress is monitored regularly.** Students must be expected to make progress on the class objective and records need to be kept relative to the various objectives.
5. **Low rates of management time and smooth transitions from one activity to another characterize the environments.** Effective

teachers are effective managers.

6. **Students spend a limited amount of time in unproductive behaviors.** Effective environments are characterized by high rates of time engaged in the subject matter.
7. **Teachers are organized and have high expectations for student achievement.** Learning activities should be structured so students will be challenged.
8. **Teachers are enthusiastic about what they are doing and are actively involved in the instructional process.** Students need to see enthusiastic models.

IV. COMPETENCIES FOR STUDENT TEACHERS

I. DEMONSTRATES PROFESSIONAL AND ETHICAL BEHAVIOR

A. Participates cooperatively in professional group enterprises and contributes constructively to the group objective.

1. Participates cooperatively in group enterprises and works constructively to achieve the group objective; disagrees courteously; avoids sarcasm; makes constructive suggestions; takes suggestions; accepts constructive criticism; and modifies behavior appropriately.
2. Relates easily and appropriately to those in authority, neither deferring submissively nor challenging blindly and indiscriminately; complies with rules and seeks change.

B. Meets university and public school requirements, deadlines and expectations promptly.

1. Meets university and public school requirements, deadlines and expectations promptly; anticipates needs and problems and plans ahead; adapts to institutional or professional standards and policies.
2. Demonstrates unsolicited and spontaneous compliance with school standards, policies and procedures.
3. Is on time for class and appointments; submits assignments and completes requirements at the appointed time; meets program deadlines; arranges ahead of time for unavoidable delays or absences; and does not solicit exceptions for any but very special and legitimate circumstances.

C. Acknowledges his/her own responsibility and culpability; does not attempt to transfer blame to others or to rationalize his/her own inadequate or missing performance.

D. Displays a commitment to education as a career; is proud to assert his/her intention of becoming a teacher; expresses and demonstrates the desire to be a competent teacher.

E. Demonstrates respect for institutional and community mores.

1. Demonstrates respect for institutional and community mores through appearance, behaviors, and statements.
2. Demonstrates pride in personal appearance, in the appearance of his/her work, and in the order of his/her environment.

II. PLANS EFFECTIVELY

A. Establishes long range and intermediate goals and develops supportive unit and daily lesson plans.
   1. Gives the rationale for, constructs and uses instructional plans.
   2. Analyzes eduational goals to identify and/or construct instructional objectives.

B. Develops appropriate objectives in terms of pupil, school, and community needs.
   1. Adapts the curriculum to student needs.
   2. Plans learning experiences on the basis of diagnosis.
   3. Identifies and selects appropriate materials reflecting various cultures.
   4. Analyzes learning styles of students.
   5. Develops instructional objectives which clarify expectations for student performance and facilitates evaluation.
   6. Specifies minimum standards of performance in academic achievement.
   7. Applies knowledge of one major taxonomy in each of the cognitive, affective, and psychomotor growth.
   8. Writes and/or selects instructional objectives appropriate to each level of a taxonomy.
   9. Designs, selects, or adapts learning activities appropriate to the developmental stages of cognitive, affective and psychomotor growth.
   10. Identifies students' needs in relation to curricular goals using various needs assessment procedures.
   11. Plans for students to work through the learning sequence at their own rate.
   12. Prepares materials in sequences that are logically and/or psychologically sound.

C. Involves students in curriculum decision-making.
   1. Plans opportunities for students to make some decisions about what, when, and how they will learn.
   2. Plans activities to develop openness, trust, positive group leadership roles, process observation, brainstorming, and consensus building.

D. Prepares instructional materials such as transparencies, handouts, tapes, slides, posters, to assist students in meeting specific objectives.
   1. Includes in lesson plans appropriate specific resources to assist students in meeting specific objectives.
   2. Plans learning experiences which utilize a variety of media.

E. Demonstrates the ability to select an appropriate method of instruction for a given learning style.
   1. Organizes group activities suited to the learning needs of students.
   2. Modifies physical environment to meet needs and interests of students.
   3. Provides flexibility in lesson plans.
   4. Plans for the use of a variety of teaching strategies.
   5. Plans for the active participation of students.

III. DEMONSTRATES EFFECTIVE TEACHING PERFORMANCE
- A. Implements instructional plans
  1. Presents material in an organized and logical sequence
  2. Uses appropriate methods of instruction
  3. Uses a variety of teaching strategies
  4. Utilizes a variety of resources appropriate to instruction (tapes, film, handouts, etc.).
  5. Provides a classroom environment conducive to learning (modifies seating arrangement when necessary, plans for management of materials, bulletin boards, etc.).
  6. Motivates students by making learning activities purposeful and stimulating.
  7. Actively involves the student in the learning process.
  8. Implements plans which provide for individual and group differences.
- B. Modifies implementation of instruction as needed. Exhibit flexibility by modifying instruction in response to students' verbal and non-verbal feedback.
- C. Gives directions effectively.
- D. Utilizes effective questioning techniques. Stimulates mental involvement and logical reasoning through questioning techniques.

IV. DEMONSTRATES ADEQUATE KNOWLEDGE OF CONTENT
- A. Identifies basic concepts of content area(s).
- B. Demonstrates adequate and up-to-date knowledge of basic concepts of content area(s).
  1. Demonstrates knowledge of and ability to present specialized vocabulary of the content area.
  2. Answers most of students' content related questions.
  3. Shows awareness of resources and material for effective content area teaching.
- C. Illustrates concepts with appropriate examples. Provides a framework which links new content to student experiences and understanding.

V. DEMONSTRATES ABILITY TO PROVIDE FOR INDIVIDUAL DIFFERENCES OF STUDENTS
- A. Assesses individual student needs using formal and informal methods.
- B. Selects appropriate methods of instruction based on assessment.
- C. Adapts instructional methods for students with language and cultural differences.
- D. Adapts instructional methods for students with handicaps and learning disabilities.
- E. Uses appropriate instructional methods and materials incorporating varying reading levels of individual students.

VI. COMMUNICATES EFFECTIVELY
- A. Demonstrates effective verbal communication.
  1. Speaks with confidence, clarity, and grammatical correctness which will provide a good model of spoken English and/or Spanish for students.

B. Demonstrates effective non-verbal communication.
   1. Identifies and analyzes non-verbal behavior (own and students).
   2. Utilizes non-verbal communication effectively (to modify student behavior and to motivate and enhance student learning).
   3. Receives and responds appropriately to non-verbal communication.

C. Demonstrates effective written communication.
   1. Demonstrates effective command of written English and/or Spanish through the composition of written material that is clear and grammatically correct.
   2. Demonstrates the ability to organize writing so it communicates ideas, directions, and explanations to the students.

VII. DEMONSTRATES EFFECTIVE CLASSROOM MANAGEMENT

A. Manages routine matters efficiently.
   1. Performs daily attendance, lunch count, etc. quickly and efficiently.
   2. Provides for smooth distribution and collection of materials, papers, etc.
   3. Effects transitions from one activity to another in an orderly way.
   4. Informs students of daily and long term requirements and schedules to avoid unnecessary delay and confusion.
   5. Has all materials prepared and ready for all daily activities.
   6. Adapts to and utilizes unexpected situations.

B. Maintains a disciplined classroom
   1. Involves students in defining and developing acceptable behaviors.
   2. Identifies non-acceptable student behavior and acts in positive ways to improve behavior.
   3. Fosters self-discipline and self-control of students.
   4. Utilizes varied non-verbal management techniques effectively.
   5. Shows awareness of activities going on in the classroom even though involved in giving small group instruction.
   6. Uses questioning patterns which are conducive to orderly responses.
   7. Provides and encourages constructive use of free-time activities.

C. Arranges an attractive and functional classroom environment.
   1. Utilizes flexible seating arrangements, dependent on activity.
   2. Plans centers, and instructional areas to conform to traffic patterns.
   3. Deals appropriately with special needs of individual students.
   4. Provides centers with interesting materials, frequently changed, with care to ensure that students know what is expected of them in the use of the center or material.
   5. Encourage attitudes of respect for classroom furniture

and materials.
6. Considers lighting, ventilation, and other physical aspects of classroom needs.
7. Plans for student involvement in design and preparation of bulletin boards, displays, and learning centers related to objectives and student interests.

D. Shows the ability to organize and facilitate a variety of instructional patterns.
1. Varies plans and expectations for different groups.
2. Depending on outcomes desired, groups according to interest, individual differences, and self-selection.
3. Identifies and solves classroom instructional problems.

VIII. DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS

A. Operates in a democratic manner.
1. Shows no favoritism or partiality in grading, assigning seats, delegating desirable or undesirable classroom tasks.
2. Includes all students in discussions, directs questions to many students, not just a few.

B. Provides for individual and group recognition.
1. Learns and correctly pronounces students' names.
2. Encourages and recognizes student progress, effort and initiative.
3. Values student ideas, suggestions and opinions.
4. Displays every student's work.
5. Relies on more than just extrisic rewards. (Giving stars to those students who are already receiving more than their share of positive strokes.)

C. Shows respect for each class member.
1. Avoids labeling students either in or out of the classroom.
2. Uses verbal discipline in a non-threatening way.
3. Shows sincere concern for the personal and intellectual growth of class members.
4. Uses flexible grouping not alway based on grades or ability.
5. Listens with care and empathy to student.

D. Shows sensitivity to the interests and needs of individual students and instructional groups.
1. Utilizes informal situations to communicate with students (hall, playground, etc.)
2. Evaluates the instructional plans.
3. Evaluates the implementation of instructional plans.
4. Incorporates specific observational feedback from supervisors, students, and peers.
5. Modifies planning and teaching strategies based on input from supervisors, students, and peers.

V. TRADITIONAL SUPERVISION/OBSERVATION TECHNIQUES AND EVALUATION

Instruction has most often been evaluated using inexact and insensitive methods such as intuition, checklists, and rating scales. Over the years, these methods have proved relatively ineffective in improving the quality of instruction. The use of evaluator's intuition relies on the expertise of a supervisor who observes the instruction then recommends changes and reinforces specific practices. Supervisors who have the same exact background as the teacher are hard to find.

Checklists and rating scales are often used as evaluation tools and give the appearance of an objective, quantified method. The ratings are quite unreliable and become more so when the number of check points are increased. Scales and checklists are open to a wide spread of interpretation, depending on who is performing the evaluation. Checklists and rating scales are subject to the impressions and opinions of the evaluator rather than resulting from objective data.

The sections on teacher effectiveness and student teacher competencies clearly illustrate that many behaviors and/or teaching skills can be monitored systematically during the student teaching experience. Once again, the major problem is that many of the behaviors/skills are either not evaluated or evaluated intuitively. The following are examples of student teacher final evaluations;

> "Mr. Smith did a satisfactory job during his student teaching at McDonald H.S. in history. Mr. Smith was well prepared and got along well with faculty and students. I recommend Mr. Smith for a teaching position in his area of certification."

> "Judy did a good job during her student teaching at Jones Elementary School. She is a very professional and responsible individual. Judy at times had problems with classroom management and off task behavior, but improvements were made. Judy has the potential to become an excellent teacher, thus I recommend her for a teaching position in the public schools."

Most supervising teachers never specify how much progress was or was not made by student teachers in various teaching skills. Student teachers are told intuitively what behaviors/skills need improvement, but specific targets/goals are never set. Of course, because of the generalities of measurement/accountability during student teaching, it is no wonder that student teaching evaluations are so general.

VI. SYSTEMATIC OBSERVATION

Systematic methods of observing teachers quantify the teaching processes. Methods advocated in this presentation are for both evaluative purpose and self improvement, with the goal of improving teaching effectiveness.

A variety of techniques will be offered in this manuscript. The use of these techniques will help the teaching and management skills of student teachers. The importance of a post-observation conference in order to give the student teacher feedback on the data collected in the observation and to check and/or set new specific goals, etc. is suggested (See Section VII).

A. Methods For Systematically Observing Instruction

1. Event Recording

This technique involves recording the number of times a predefined event occurs during a specified time period. Event recording identifies the frequency with which certain behavior occurs. Typical events for which this technique may be used are as follows: the number of questions asked in a given time, amount of verbal praises to students, number of times students get out of their seat, number of managerial episodes during a lesson, etc.

2. Duration Recording

Duration recording reveals the length of time that a behavior takes in terms of minutes and seconds in a given time period. These data are usually converted to percentages so comparisons can be made from lesson to lesson. Examples of duration recording are: percentage of management and substantive time during a class, amount of time devoted to teacher talk, etc. The use of a stop watch should be used for this technique.

3. Interval Recording

Interval recording is used to record behavior patterns for short time intervals. The intervals should be 6 to 12 seconds in length, with one interval for observing and the other for recording can be used to record instructional time; managerial time, time on task, and various teacher behaviors such as answering questions, lecturing, asking questions, giving directions, feedback, etc.

4. Placheck Recording

Placheck (Planned Activity Check) recording is similar to interval recording in that the behavior is observed at different intervals, but this technique is used to observe group behavior. e.g., the observer scans the class from left to right for approximately 15 seconds then takes 5 seconds to record the number of students engaged/not engaged in the activity/behavior. Beginners can use longer plachecks than 20-second plachecks but it is recommended not to use ones larger than 1 minute. A cueing tape (audio tape with ear jack) can be used to signal the observer when to scan every placheck (example every 20 seconds). Examples of use; time on task, in seat behavior, appropriate behavior, etc.

B. Examples of Recording Techniques

One of the best ways to improve teachers' effectiveness is to give them concrete data on classroom events, behaviors, skills, etc. It is suggested that supervisors work on no more than 1 or 2 behaviors at a time. It is important that explicit goals be set with the teachers and once a goal is accomplished, move on to another behavior/skill. Of course, it is important to go back and check each behavior after it has been accomplished in order to see if the behavior has been maintained at 75% level of the original goal.

From the data collected, supervisors will have something concrete to say in an evaluation as to what behaviors/skills were improved, which ones need work, etc. rather than the intuitive, subjective evaluations

one usually reads.

The examples given in this manuscript on systematic observation techniques are just a few of the possibilities available to improve teaching. What is offered will not be enough to train an individual in this area, but may be enough to get one started. If you need help or would like further training please contact the Coodinator of Student Teaching at Southwest Texas State University.

1. Event Recording Example

   A. Appraisals (Examples)
   General Positive - Great Job, Excellent, way to go!
   General Corrective - That's wrong, incorrect.
   Specific Positive - That's the way to line up. I like the colors you used in your map.
   Specific Corrective - Next time, see if you can leave a little more space between units.
   General Negative - Quiet, Shut up.
   Specific Negative - Stop it, I told you not to hit him anymore.

Keys; individual I
group/class ✓ Example 20 minute observation

	Positive	Corrective	Negative
General 13	𝍸 𝍸 III	𝍸 5	II 2
General 10	✓✓✓✓✓✓✓✓✓✓	✓✓ 2	✓✓✓ 3
Specific 9	𝍸 IIII	𝍸 𝍸 10	
Specific 3	✓✓✓	✓✓✓✓✓✓ 6	

# of Positive 35
# of Corrective 23
# of Negative 5

Rate Per Minute (Neg not includ.) 2.9
Ratio Pos/Corr 5-3
Ratio I/Group 5-3

Goals
Increase rate per minute to 4
Decrease Negatives to 0
Increase positive to corrective ratio 3-1

   B. Can also use event recording to measure types of questions asked;
   recall, convergent, divergent and value.

2. Duration Recording Example (Time Analysis)
   Amount of time on management (organization/discipline) and substantive time (subject matter) within a given time period or lesson.
   *Use stopwatch

	Management	Substantive	Total Time
	:30	1:00	30 Min 40 Sec
	:20	:25	
	1:30	7:35	
	:15	2:30	
	:55	4:00	
	:15	8:00	
	:30	2:00	
	:25		
Total	4.67 Min	26.00 Min	
	4:40 Sec	Sub 85%	

Man. 15%

Avg. episode length 35 sec

*It is also possible to combine techniques such as event recording and duration recording. With practice, event recording of appraisals and duration recording of time analysis could easily be done.

Goals

Decrease Management time to under 10%
Decrease Average Management episode length to 15 seconds or less.

3. Placheck Example
   Class on Task Behavior
   Use of tape recorder, 20 seconds observe/10 seconds record (for beginners). Twenty (20) students in class. Each placheck 20/10 takes 30 seconds. For a 30 minute class you need 60 plachecks.

Example of Placheck (On Task)

Keys
Substantive S
Managerial M

1. 18/20 M	16. 20/20 M	31. 20/20 S	46. 20/20 S
2. 20/20 M	17. 20/20 M	32. 20/20 S	47. 20/20 S
3. 20/20 M	18. 20/20 S	33. 18/20 S	48. 20/20 S
4. 20/20 M	19. 14/20 S	34. 19/20 S	49. 20/20 S
5. 20/20 S	20. 15/20 S	35. 20/20 S	50. 12/20 M
6. 20/20 S	21. 15/20 S	36. 18/20 S	51. 20/20 M
7. 20/20 S	22. 17/20 M	37. 17/20 S	52. 18/20 M
8. 20/20 S	23. 18/20 M	38. 20/20 S	53. 20/20 M
9. 20/20 S	24. 20/20 M	39. 18/20 S	54. 20/20 S
10. 20/20 S	25. 20/20 M	40. 16/20 S	55. 20/20 S
11. 18/20 S	26. 20/20 S	41. 20/20 M	56. 20/20 S
12. 16/20 S	27. 20/20 S	42. 20/20 M	57. 20/20 M
13. 17/20 S	28. 20/20 S	43. 20/20 M	58. 20/20 S
14. 18/20 S	29. 20/20 S	44. 20/20 S	59. 20/20 M
			60. 16/20 M

Students # of Plachecks
20 x 60 = 1200

Total on task 1129/1200 = 94%
M 18/60 30%
S 42/60 70%

Total on Task day Substantive time
782/840=93%

Goals
1. Decrease Management time to under 18%
2. Increase substantive time to over 85%
3. Maintain on task behavior and on task behavior percentage during substantive time

(12 Minute Observation)

4. Interval Recording Example

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Class	MC	-	SC	-	-	-	-	-	MC	SC	-	-	-	MC	SI	-	-	-	-	MC
Student	ON	-	E	-	-	-	-	-	ON	E	-	-	-	W	E	-	-	EI	E	ON
Teacher	G	-	L	-	-	-	F	L	G	LS	L	-	LS	NF	M	F	M	F	F	G

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Class	MC	-	SC	-	-	-	-	-	MC	SC	-	-	-	MC	SI	-	-	-	-	MC
Student	ON	-	E	-	-	-	-	-	ON	E	-	-	-	W	E	-	-	E	-	ON
Teacher	G	-	L	-	-	-	F	-	G	Q	L	A	L	NF	M	F	-	F	M	G

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Class	MC	-	SC	-	-	-	-	-	-	-	-	-	-	MC	SI	-	-	-	MC	-
Student	ON	-	E	-	-	OF	-	E	-	-	-	-	-	OF	E	-	-	OF	ON	-
Teacher	G	-	L	-	-	-	-	-	Q	-	F	Q	F	G	F	M	N	F	G	-

6/6 observation cueing tape

Class

45/60 77%
75% Substantive (S) Class (C) 46/60
25% Management (M) Groups (G) 14/60
15/60 Individual (I)
23%

Teacher

Lecture (L) 19/60 32%
Give Directions (G) 13/60 22%
Ask Questions (Q) 3/60 5%
Answer Questions (A) 1/60 2%
Feedback (F) 13/60 22%
Non-Functional (NF) 2/60 3%
Monitoring (M) 5/60 8%
Listening (LS) 3/60 5%
Nag (N) 1/60 2%

30%
Student

18/60 42/60 70%
OFF Task (OF) Engaged (E)
Waiting (W) Engaged Inap (EI)
Interim (I) Engaged Supportive (ES)
On Task (ON)

Time on Task
40/60 = 67%

Class Time 12 min.
Man. Time 3 min.
Sub. Time 9 min.
Eng Time 8.4 min. 93% of sub. time
ALT (Time on Task) 8 min. 95% of Eng. time

C. Examples Continued

Duration Recording

1. The amount of time a teacher spent in direct instruction compared to indirect instructions.
2. Teacher talk vs. Student talk.
3. Amount of time praising students, correcting students, etc.
4. Class Instruction vs. Individual Instruction vs. Group Instruction.

Class	Individual	Group

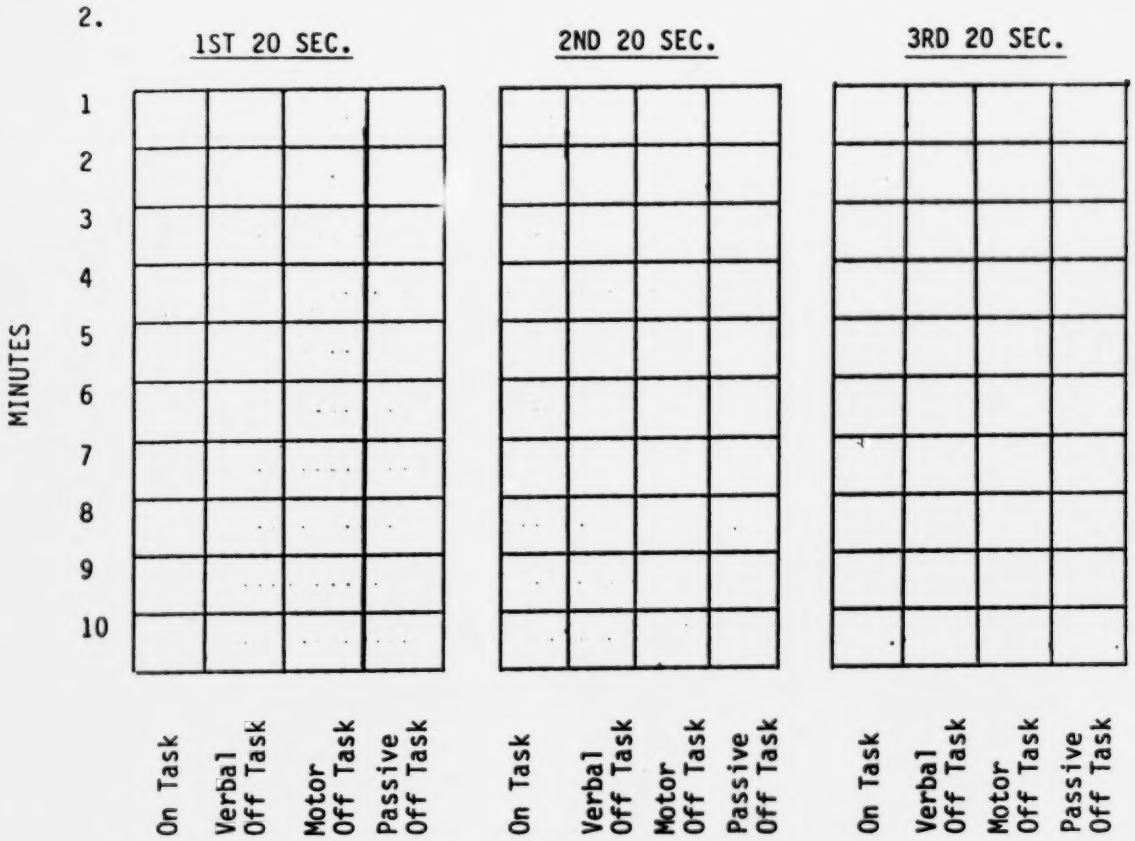
TOTAL _____ % _____ % _____ %

Interval Recording

	1st 10 sec. Mike	2nd 10 sec. Tony	3rd 10 sec. Rich	4th 10 sec. Margo	5th 10 sec. Mary	6th 10 sec. Ann
1						
2						
3						
4						
5						
6						

✓Attending
* Not Attending

2.



10 second observe/10 second record

* can be used for individual
can be used for class (scan class)
put number in box with longer record time, 20 second observe
40 second record, use only 1 block

3. Event Recording

A. Flanders' Interaction Analysis Scale

TEACHER TALK	Indirect Influence	1. Accepts Feeling: accepts and clarifies the feeling tone of the students in a non-threatening manner. Feelings may be positive or negative. Predicting or recalling feelings are included. 2. Praises or Encourages: praises or encourages student action or behavior. Jokes that release tension, not at the expense of another individual, nodding head or saying "um hm" or "go on" are included. 3. Accepts or Uses Ideas of Student: clarifying, building, or developing ideas or suggestions by a student. As teacher brings more of his ideas into play, shift to category five. 4. Asks Question: asking question about content or procedure with the intent that a student answer.
	Direct Influence	5. Lecturing: giving facts or opinions about content or procedure; expressing his own ideas, asking rhetroical questions. 6. Giving Directions: directions, commands, or orders to which a student is expected to comply. 7. Criticizing or Justifying Authority: statements intended to change student behavior from non-acceptable to acceptable pattern; bawling someone out; stating why the teacher is doing; extreme self-reference.
STUDENT TALK		8. Student Talk--Response: talk by students in response to teacher. Teacher initiates the contact or solicits student statement. 9. Student talk-Initiation: talk by students which they initiate. If "calling on" student is only to initiate who may talk next, observer must decide whether student wanted to talk. If he did, use this category.
		10. Silence or Confusion: pauses, short periods of silence and periods of confusion in which communication cannot be understood by the observer.

RECORD BLANKS FOR FLANDERS' INTERACTION ANALYSIS SCALE

5 MINUTE SEGMENTS OF INSTRUCTION	Category of Responses 1	2	3	4	5	6	7	8	9	10
1 - 5 Minutes										
6 - 10 Minutes										
11 - 15 Minutes										
16 - 20 Minutes										

4. Observation System for Instructional Analysis (OSIA)

Independent Behaviors	1. Thinking - any nonappraisal behavior in which a person is apprently reflecting on some substantive or managerial aspect of classroom instruction. 2. Sensing - any nonappraisal behavior in which a person uses one's senses (seeing, hearing, feeling, etc.) to take in information from an external source. 3. Manipulating Artifacts - any nonappraisal behavior in which one manipulates instructional materials. 4. Initiating - any nonappraisal behavior that presents substantive or managerial information to another or others. 5. Responding - a nonappraisal behavior that presents substantively or managerially to an element in the instructional situation. 6. Soliciting Clarification - a nonappraisal behavior that evokes or is intended to evoke from another person the fuller meaning of an antecedent behavior. 7. Soliciting - nonappraisal behavior that evokes or is clearly intended to evoke substantive and/or managerial behavior from another person.
Appraisal Behaviors	8. Judging Correctness - behavior that responds or reacts to an antecedent behavior. 9. Personal Positive Judging - behavior that responds or reacts to a person, self, or to a product of such a behavior is expressing a personal positive judgement. 10. Acknowledging - no judgement is explicitly expressed to a behavior. 11. Judging Incorrectness - responds to a behavior or product of a behavior as incorrect. 12. Personal Negative Judging - responds to a person or self by expressing a personal negative judgement about the person or the behavior.
	13. Instructionally Nonfunctional - a behavior that does not have a functional place in the classroom.

Record Blanks for OSIA

	1	2	3	4	5	6	7	8	9	10	11	12	13
S 1-5 Minutes													
M													
S 6-10 Minutes													
M													
S 11-15 Minutes													
M													
S 16-20 Minutes													
M													

T = teacher
S = student
Interval Scale 6/9 sec.

VII. SETTING GOALS, CHANGING BEHAVIOR AND ACCOUNTABILITY

As mentioned in the previous section systematic observation during the student teaching experience is vitally important. It is just as important to share the data collected with the student teacher as it is to collect it. A major step in most supervision models is the feedback loop (conferencing) and the setting of goals for student teachers. Many supervisors/cooperating teachers do have conferences with student teachers, but do not hold student teachers accountable for attaining certain teaching skills/behaviors.

It is not enough to tell a student teacher that improvements are needed in classroom management, student on task behavior or higher order questioning. Explicit goals that hold the intern accountable should be written rather than implicit goals. Here are some examples;

Implicit - You need to decrease the amount of time in classroom management.

Explicit - Over the next 2 weeks in 3rd period class decrease the amount of time in management from the average of 34% to under 18%.

Implicit - Lets work on cutting down your student off task behavior during language arts.

Explicit - During the language arts period student off task behavior will be decreased from 20% to under 10% by midterm.

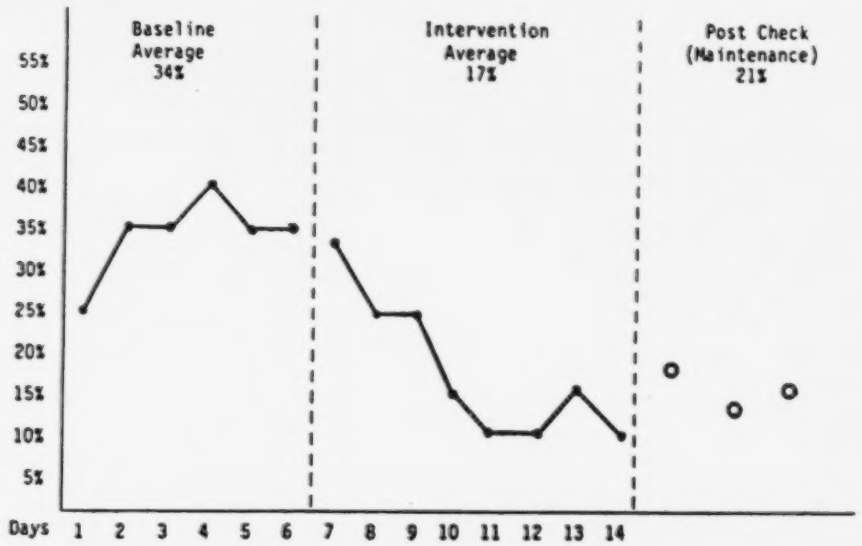
Implicit - Increase the amount of higher order questioning during classes.

Explicit - By the next to last week of student teaching higher order questions will be doubled from baseline average in the two history classes monitored.

It is also advised that supervisors only work on one or two skills/behaviors at a time. One rule of thumb is that after a goal is met on a certain teaching behavior or skill a new goal on another skill/behavior can be intervened on. It is still imperative to periodically monitor past goals that were accomplished to see if they are being maintained at a 75% level of the original goal. Most student teachers can attain on an average 8-10 goals over a semester of student teaching. Again most models of supervision do call for the setting of goals, but the setting of explicit goals over the experience will lead to higher rates of task accomplishment and increased teaching effectiveness than if those same goals were written implicitly.

When attempting to change a behavior it is also advised that it be done gradually. A supervisor does not write an explicit goal after collecting baseline data for one week and then expect the student teacher to accomplish that goal in the next day or two.

The use of graphic feedback can be a valuable intervention technique when attempting to change teaching behaviors. After baseline data has been set, supervisors can periodically illustrate an intern's progress. Example (Management Time);



The baseline average for management time was 34%. The supervisor set an explicit goal to decrease management to 17%. During the intervention phase the student teacher decreased management to approximately 17%. After intervention, the supervisor began working on other skills/behaviors, but periodically checked management to see if the behavior was being maintained at 75% of the original goal during intervention.

The use of video or audiotaping will also allow student teachers to monitor their own teaching behaviors, set explicit goals with their cooperating teachers/supervisors, and chart their own progress.

Conclusion

Teacher effectiveness research has evolved significantly over the past 10-15 years mainly because of systematic observation. These same techniques can and should be employed during the student teaching experience. Teaching interns can significantly improve their teaching skills during student teaching and become more confident and effective before entering the induction phase of teaching.

The use of systematic observation will lead to student teaching evaluations that are not just general overall recommendations, but evaluations that can detail specific strengths, weaknesses and improvements made during the student teaching experience. Many of the goals attained, graphs, etc. can become part of a student teaching portfolio, which more and more student teaching programs are requiring today.

The bottom line is that the more specific teaching skills and behaviors an intern can improve during student teaching, the more confident and effective the individual will be upon entering the teaching profession.

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Appendix A
(Duration/Event Recording Check)

Duration Recording

The following are examples of particular events that can take place in a classroom during observation. In the blank on the left write in **S** (Substantive Time), **M** (Management Time) or **NF** (Non Functional) as the code that best describes the particular occurence.

_____ 1. The teacher is passing back papers.

_____ 2. The students are working at their desks in silent reading.

_____ 3. The students are organizing into groups.

_____ 4. The teacher is lecturing on the Civil War.

_____ 5. The teacher is desisting a student for non-attentive behavior.

_____ 6. The class is involved in a discussion about nutrition.

_____ 7. The class is listening to an announcement over the loudspeaker.

_____ 8. A student is asking the teacher a question about a math problem.

_____ 9. Another teacher comes into the classroom and begins to silently talk to the classroom teacher.

_____ 10. The students are waiting in their seats for the teacher to set up the movie projector.

Event Recording

Write in the space to the left **GP** (General Positive), **SP** (Specific Positive), **GC** (General Corrective), **SC** (Specific Corrective) or **N** (Negative) the code that best describes the appraisal statement.

_____ 1. No, that's not correct.

_____ 2. That's right, Sue!

_____ 3. I like the different shades of blue in your picture.

_____ 4. Keep quiet when someone else is talking.

_____ 5. Next time remember to keep your columns straight when adding.

_____ 6. You did such a nice job of putting your materials away without talking!